



New species of lichenicolous fungi from the Canary Islands

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Abstract

Three new species of lichenicolous fungi from the Canary Islands (*Leightonimyces canariensis*, *Lichenodiplis anomalus* and *Perigrapha phaeophysciae*), are described as new to science. A description of each species is given together with notes on their chemistry, distribution, ecology and taxonomy. Similar species are briefly discussed.

Key words: biodiversity, lichens, Macaronesia, taxonomy

Introduction

The Canary Islands are part of Macaronesia, a phytogeographical region that includes five Atlantic volcanic archipelagos (the Azores, Madeira, the Savages, the Canary Islands and the Cape Verde Islands), as well as the Macaronesian Enclave on the African mainland. It belongs to one of the 25 World's Biodiversity Hotspots (Myers *et al.* 2000), and the Canaries play a key role within this region (Médail & Quézel 1997, 1999). The lichen and lichenicolous biota of these islands is very rich and there are more than 1600 species listed for an area of just 7447 km² (Hernández Padrón & Pérez-Vargas 2009).

Nevertheless, new records arise and new species are still being discovered constantly (e.g. Etayo & Berger 2004, Etayo & van den Boom 2005, van den Boom & Etayo 2006, Pérez-Vargas *et al.* 2010, 2012a, 2012b) confirming that the lichen and lichenicolous biota in this region is still insufficiently known. The aim of this investigation was to extend the previous knowledge of lichenicolous fungi in the area.

Material and Methods

The specimens were examined using a Leica ZOOM 2000 or a Meiji stereomicroscope. Sections for anatomical examination were cut by hand and mounted and observed in water, KOH or Congo Red. Anatomical structure and hymenial characters were studied with a Nikon Eclipse 80i light microscope. Microscopic measurements were made in water at × 1000 magnification; only well-developed ascospores lying outside the asci were measured. Measurements results are given as minimum value observed (in brackets) followed by average value obtained (confidence interval value 95%) and maximum value observed (in brackets). Specimens are deposited in the TFC-Lich Herbarium and the private collection of J. Etayo.

Leightonimyces canariensis Etayo & Pérez-Vargas, *sp. nov.* (Fig. 1) Mycobank MB 800608

Similar to *L. phillipsii* but with ellipsoid conidia with different ornamentation in transversal rows and narrower and larger conidiogenous cells.